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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,633	07/03/2003	Eric M. Weaver	1828.023US2	4613
21186 7590 09/20/2007 SCHWEGMAN, LUNDBERG & WOESSNER, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			EXAMINER KIM, YUNSOO	
			ART UNIT 1644	PAPER NUMBER
			MAIL DATE 09/20/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/613,633

Applicant(s)

WEAVER ET AL.

Examiner

Yunsoo Kim

Art Unit

1644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-18,20 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-18,20-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/3/07</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/3/07 has been entered.

2. Claims 9-18 and 20-21 are pending.

3. In light of Applicants' amendment to the claims, arguments and the supplemental declaration filed on 4/13/07, no rejections of record remain.

4. The following new rejections are set forth herein.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 9-18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 4,816,252 (IDS reference, newly cited) in view of Japan Patent No. 61-13243 (IDS, newly cited) and U.S. Pat. No. 4,623,541 (IDS reference, newly cited).

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The '252 patent teaches a method comprising the administration of IgG supplements in the water source of an animal, including a post weaning or new born cow for the transfer of passive immunity to said animal (col. 4, lines 64-67, col. 24, lines 55-60, in particular). The '252 patent further teaches that the IgG concentration of about 50% IgG is ideal for natural passive immunity transfer mechanism (col. 5, lines 33-39, Fig 3, in particular).

The '252 patent does not teach the supplement comprising IgG to promote weight gain and growth in a specific dispersed concentration of about 0.375-3% by weight or 0.1-0.75% by weight.

However, Japan Paten 61-13243 teaches the use of IgG as feed supplement to promote weight gain (abstract, in particular).

The '541 patent teaches the use of animal plasma-derived immunoglobulins in a liquid feed source provides weight gain and decrease mortality in piglets in concentration encompassing "about 0.1-0.75% or 0.375-3% by weight" and a dose of 0.5g Ig/hd/day or more (Example 1, biological test, in particular). The '541 patent further teaches that the IgG from serum or plasma can be mixed with other nutrients including vitamin, carbohydrates and minerals (col. 5, lines 55-65, in particular).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to administer IgG supplement in the water source of animal, including a cow as taught by the '252 patent or to piglet to promote weight gain as taught by Japan Patent No. 61-13243 or to use IgG concentrate as a feed supplement for piglets and to optimize the concentration of IgG for maximum weight gain and growth while decreasing mortality.

One of ordinary skill in the art at the time the invention was made would have been motivated to do so because the claimed dosages and the claimed additives to achieve a method for weight gain and decrease mortality as taught by the JP '243 patent and the '541 patent and the optimization of various concentration and dosages would be required by animals of different weights and ages with different nutritional and immunological need are well within the purview of one of skill in the art at the time the invention. Moreover, one of the ordinary skill in the art would have been

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motivated to substitute IgG derived from animal plasma because the animal plasma provides a convenient source for the high purity immunoglobulins as taught by the '541 patent.

From the teachings of the references, one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was prima facie obvious to one of the ordinary in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

7. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 4,816,252 (IDS reference, newly cited) in view of Japan Patent No. 61-13243 (IDS, newly cited) and U.S. Pat. No. 4,623,541 (IDS reference, newly cited). as applied to claim 9 above, and further in view of U.S. Pat. No. 5,143,257, (of record).

The teachings of '252 patent, JP '243 patent and the '541 patent have been discussed, supra.

The references do not teach administering IgG via water system including liquid dispenser as in claim 20.

However, the '257 patent teaches the mixing of nutrients (e.g. water soluble supplement) in "drinking water" supply is common practice in livestock or farming industry to ensure good health at maturity. In this manner, the livestock readily avoid common ailments that could cause premature death while dispensing in controlled dosages to the various animals to avoid potential adverse effects from overdosing. It is also essential for the commercial well being of the farmer as well. The liquid dispensing system in the farm industry is well known in the art (col. 1, lines 10-33, claims 1-13, in particular).

As the supplement may be mixed in "drinking water", it will not be provided via animal's feed sources or milk replacement.

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to administer blood-derived immunoglobulin supplement to improve weight gain and growth while decreasing mortality as taught by the '252 patent, JP '243 patent and the '541 patent in drinking water as a direct water source as taught by the '257 patent.

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One of ordinary skill in the art at the time the invention was made would have been motivated to do so because the '257 patent teaches that it is a common practice to mix nutrients in drinking water and provide as direct water source to various animals to avoid any potential adverse effects from overdosing while controlled dispensing (e.g. liquid dispenser) improves commercial well being of the farmers as well.

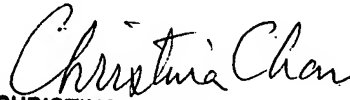
From the teachings of the references, one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was prima facie obvious to one of the ordinary in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

8. No claims are allowable

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yunsoo Kim whose telephone number is 571-272-3176. The examiner can normally be reached on Monday thru Friday 8:30 - 5:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on 571-272-0841. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Yunsoo Kim
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September 11, 2007


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